

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAMEN1774

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JUL 02 LMedLINE coverage updated  
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/CAPLUS enhanced with utility model patents from China  
NEWS 6 JUL 16 CAPLUS enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/CAPLUS patent coverage enhanced  
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 BEILSTEIN updated with new compounds  
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 13 AUG 13 CA/CAPLUS enhanced with additional kind codes for granted patents  
NEWS 14 AUG 20 CA/CAPLUS enhanced with CAS indexing in pre-1907 records  
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 16 AUG 27 USPATOLD now available on STN  
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 19 SEP 13 FORIS renamed to SOFIS  
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 21 SEP 17 CA/CAPLUS enhanced with printed CA page images from 1967-1998  
NEWS 22 SEP 17 CAPLUS coverage extended to include traditional medicine patents  
NEWS 23 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 24 OCT 02 CA/CAPLUS enhanced with pre-1907 records from Chemisches Zentralblatt  
  
NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\*\*\*\*\* STN Columbus \*\*\*\*\*

FILE 'HOME' ENTERED AT 08:14:55 ON 04 OCT 2007

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'CAPLUS' ENTERED AT 08:15:04 ON 04 OCT 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 4 Oct 2007 VOL 147 ISS 15  
FILE LAST UPDATED: 3 Oct 2007 (20071003/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> e us2005233164

E1	1	US20050208488/BI
E2	1	US20050277160/BI
E3	0 -->	US2005233164/BI
E4	1	US2005A/BI
E5	1	US2006/BI
E6	1	US20060074130/BI
E7	1	US20060155128/BI
E8	1	US20060217417/BI
E9	1	US2007/BI
E10	1	US201/BI
E11	1	US2010/BI
E12	2	US202/BI

=> e us2005233164/pn

E1	1	US2005233162/PN
E2	1	US2005233163/PN
E3	1 -->	US2005233164/PN
E4	1	US2005233165/PN
E5	1	US2005233166/PN
E6	1	US2005233167/PN
E7	2	US2005233168/PN
E8	1	US2005233169/PN
E9	1	US2005233170/PN
E10	2	US2005233171/PN
E11	1	US2005233172/PN
E12	2	US2005233173/PN

=> s e3

L1 1 US2005233164/PN

=> d l1 all

L1 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 2003:796823 CAPLUS Full-text  
DN 139:299047  
ED Entered STN: 10 Oct 2003  
TI Organic electroluminescent device using aluminum bis(2-methyl-8-quinolinolato)(naphthalenolato) host material  
IN Tsuji, Taishi; Miyazaki, Hiroshi  
PA Pioneer Corporation, Japan; Nippon Steel Chemical Co., Ltd.  
SO PCT Int. Appl., 62 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM C09K011-06  
ICS H05B033-14  
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003083009	A1	20031009	WO 2003-JP3776	20030327
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003227239	A1	20031013	AU 2003-227239	20030327
	EP 1493797	A1	20050105	EP 2003-715461	20030327
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1643109	A	20050720	CN 2003-807394	20030327
	US 2005233164	A1	20051020	US 2005-509390	20050628 <--
PRAI	JP 2002-96908	A	20020329		
	WO 2003-JP3776	W	20030327		

# CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003083009	ICM	C09K011-06
	ICS	H05B033-14
	IPCI	C09K0011-06 [ICM,7]; H05B0033-14 [ICS,7]
	IPCR	C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
AU 2003227239	ECLA	C09K011/06; H01L051/00M12D
	IPCI	C09K0011-06 [ICM,7]; H05B0033-14 [ICS,7]
	IPCR	C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
EP 1493797	ECLA	C09K011/06; H01L051/00M12D
	IPCI	C09K0011-06 [ICM,7]; H05B0033-14 [ICS,7]
	IPCR	C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
CN 1643109	ECLA	C09K011/06; H01L051/00M12D
	IPCI	C09K0011-06 [ICM,7]; H05B0033-14 [ICS,7]
	IPCR	C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
US 2005233164	ECLA	C09K011/06; H01L051/00M12D
	IPCI	H05B0033-14 [ICM,7]; C09K0011-06 [ICS,7]
	IPCR	C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-05 [I,C*]; H01L0051-30 [I,A]; H01L0051-50 [N,C*]; H01L0051-50 [N,A]
	NCL	428/690.000; 257/102.000; 257/103.000; 257/E51.041; 257/E51.043; 257/E51.044; 257/E51.049; 257/E51.051; 313/504.000; 313/506.000; 428/917.000; 546/007.000
	ECLA	C09K011/06; H01L051/00M12D

AB The invention refers to an organic electroluminescent device comprising an Al bis(2-methyl-8-quinolinolato)(naphthalenolato) complex as a host and a phosphorescent guest material.

ST electroluminescent device aluminum quinolinolato naphthalenolato phosphorescent material

IT Electroluminescent devices  
Phosphorescent substances

(organic electroluminescent device using aluminum bis(2-methyl-8-quinolinolato)(naphthalenolato) as host material)

IT 31248-39-2, Platinum 2,3,7,8,12,13,17,18-octaethyl-21H,23H-porphyrin 146162-64-3

RL: DEV (Device component use); USES (Uses)

(organic electroluminescent device using aluminum bis(2-methyl-8-quinolinolato)(naphthalenolato) as host material)

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Tohoku Pioneer Corp; JP 2001326080 A1 2001 CAPLUS

(2) Toyo Ink Manufacturing Co Ltd; JP 2001271063 A 2001 CAPLUS

=> s 31248-39-2/rn

320 31248-39-2

4 31248-39-2D  
L2 317 31248-39-2/RN  
(31248-39-2 (NOTL) 31248-39-2D )

=>  
=>  
Connection closed by remote host

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAMEN1774

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS 1 Web Page for STN Seminar Schedule - N. America  
NEWS 2 JUL 02 LMEDLINE coverage updated  
NEWS 3 JUL 02 SCISEARCH enhanced with complete author names  
NEWS 4 JUL 02 CHEMCATS accession numbers revised  
NEWS 5 JUL 02 CA/Capplus enhanced with utility model patents from China  
NEWS 6 JUL 16 Capplus enhanced with French and German abstracts  
NEWS 7 JUL 18 CA/Capplus patent coverage enhanced  
NEWS 8 JUL 26 USPATFULL/USPAT2 enhanced with IPC reclassification  
NEWS 9 JUL 30 USGENE now available on STN  
NEWS 10 AUG 06 CAS REGISTRY enhanced with new experimental property tags  
NEWS 11 AUG 06 BEILSTEIN updated with new compounds  
NEWS 12 AUG 06 FSTA enhanced with new thesaurus edition  
NEWS 13 AUG 13 CA/Capplus enhanced with additional kind codes for granted patents  
NEWS 14 AUG 20 CA/Capplus enhanced with CAS indexing in pre-1907 records  
NEWS 15 AUG 27 Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB  
NEWS 16 AUG 27 USPATOLD now available on STN  
NEWS 17 AUG 28 CAS REGISTRY enhanced with additional experimental spectral property data  
NEWS 18 SEP 07 STN AnaVist, Version 2.0, now available with Derwent World Patents Index  
NEWS 19 SEP 13 FORIS renamed to SOFIS  
NEWS 20 SEP 13 INPADOCDB enhanced with monthly SDI frequency  
NEWS 21 SEP 17 CA/Capplus enhanced with printed CA page images from 1967-1998  
NEWS 22 SEP 17 Capplus coverage extended to include traditional medicine patents  
NEWS 23 SEP 24 EMBASE, EMBAL, and LEMBASE reloaded with enhancements  
NEWS 24 OCT 02 CA/Capplus enhanced with pre-1907 records from Chemisches Zentralblatt

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,  
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 09:07:37 ON 04 OCT 2007

=>

Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE

Do you want to switch to the Registry File?

Choice (Y/n):

Switching to the Registry File...

Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 09:08:04 ON 04 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9

DICTIONARY FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

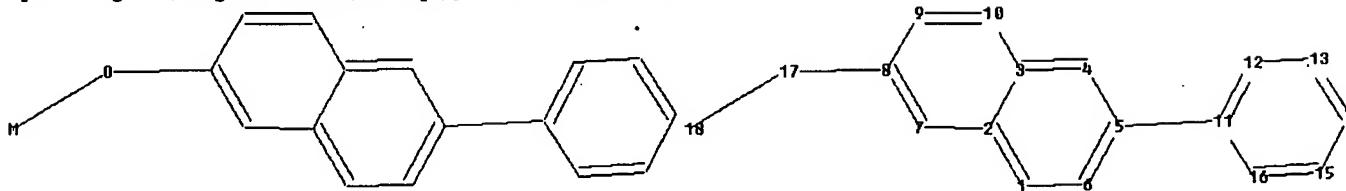
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10509390.str



chain nodes :

17 18

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

chain bonds :

5-11 8-17 17-18

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-15 15-16

exact/norm bonds :

8-17

exact bonds :

5-11 17-18

normalized bonds :

1-2 1-6 2-3 2-7 3-4 3-10 4-5 5-6 7-8 8-9 9-10 11-12 11-16 12-13 13-14  
14-15 15-16

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:CLASS 18:CLASS

L1           STRUCTURE UPLOADED

=> s l1 sss full

FULL SEARCH INITIATED 09:08:21 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 125301 TO ITERATE

100.0% PROCESSED 125301 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

L2           0 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

175.25

175.46

FILE 'CAPLUS' ENTERED AT 09:12:41 ON 04 OCT 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 4 Oct 2007 VOL 147 ISS 15

FILE LAST UPDATED: 3 Oct 2007 (20071003/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> e us515066/pn

E1	1	US5150607/PN
E2	1	US5150645/PN
E3	0 -->	US515066/PN
E4	1	US5150718/PN
E5	1	US5150722/PN
E6	1	US5150724/PN
E7	1	US515077/PN
E8	1	US515081/PN
E9	1	US5150830/PN
E10	1	US5150832/PN
E11	1	US515084/PN
E12	1	US5150905/PN

=> e us5150006/pn

E1	1	US5150004/PN
E2	1	US5150005/PN
E3	1 -->	US5150006/PN
E4	1	US5150007/PN
E5	1	US5150034/PN
E6	1	US5150035/PN
E7	1	US5150037/PN
E8	1	US5150050/PN
E9	1	US5150052/PN
E10	2	US5150053/PN
E11	1	US5150054/PN
E12	1	US5150055/PN

=> s e3

L3 1 US5150006/PN

=> d l3 all

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2007 ACS on STN  
AN 1993:505561 CAPLUS Full-text  
DN 119:105561  
ED Entered STN: 04 Sep 1993  
TI Blue-emitting internal junction organic electroluminescent device (II)  
IN Van Slyke, Steven A.; Bryan, Philip S.; Lovecchio, Frank V.  
PA Eastman Kodak Co., USA  
SO U.S., 25 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM H01J001-63  
INCL 313504000  
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)  
Section cross-reference(s): 76, 78

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5150006	A	19920922	US 1991-738777	19910801 <--
	CA 2074920	A1	19930202	CA 1992-2074920	19920729
	CA 2074920	C	19970429		
	JP 05198378	A	19930806	JP 1992-205487	19920731
	JP 3215510	B2	20011009		
	EP 534510	A1	19930331	EP 1992-202325	19920801
	EP 534510	B1	19940914		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
PRAI	US 1991-738777	A	19910801		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5150006	ICM	H01J001-63
	INCL	313504000
	IPCI	H01J0001-63 [ICM,5]; H01J0001-00 [ICM,5,C*]
	IPCR	H05B0033-12 [I,C*]; H05B0033-12 [I,A]; C07F0005-00 [I,C*]; C07F0005-06 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; H05B0033-14 [I,C*]; H05B0033-14 [I,A]
CA 2074920	NCL	313/504.000; 252/301.160; 252/301.260; 546/007.000
	IPCI	H05B0033-00 [ICM,5]; C09K0011-06 [ICS,5]
	IPCR	H05B0033-12 [I,C*]; H05B0033-12 [I,A]; C07F0005-00 [I,C*]; C07F0005-06 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; H05B0033-14 [I,C*]; H05B0033-14 [I,A]
JP 05198378	IPCI	H05B0033-14 [ICM,5]; C09K0011-06 [ICS,5]
	IPCR	H05B0033-12 [I,C*]; H05B0033-12 [I,A]; C07F0005-00 [I,C*]; C07F0005-06 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; H05B0033-14 [I,C*]; H05B0033-14 [I,A]
EP 534510	IPCI	H05B0033-14 [ICM,5]; H05B0033-20 [ICS,5]; H05B0033-12 [ICS,5,C*]; C09K0011-06 [ICS,5]
	IPCR	H05B0033-12 [I,C*]; H05B0033-12 [I,A]; C07F0005-00 [I,C*]; C07F0005-06 [I,A]; C09K0011-06 [I,C*]; C09K0011-06 [I,A]; H01L0051-50 [I,C*]; H01L0051-50 [I,A]; H05B0033-14 [I,C*]; H05B0033-14 [I,A]

OS MARPAT 119:105561

AB The title electroluminescent devices are provided with electron injection and transporting zones incorporating a luminescent layer formed from an Al chelate described by the general formula (R-Q)2-Al-O-L (each Q = an independently selected substituted 8-quinolinolato ligand; R = an 8-quinolinolato ring substituent chosen to block the attachment of >2 substituted 8-quinolinolato ligands to the Al; and L = a Ph or aromatic fused ring moiety which can be substituted with hydrocarbon groups so that L has 6-24 C atoms).

ST aluminum quinolinolato chelate electroluminescent device

IT Luminescent substances

(aluminum quinolinolato chelates)

IT Electroluminescent devices

(with aluminum quinolinolato chelate luminescent layers)

IT	146162-49-4P	146162-50-7P	146162-51-8P	146162-52-9P	146162-53-0P
	146162-54-1P	146162-55-2P	146162-56-3P	146162-57-4P	146162-58-5P
	146162-59-6P	146162-60-9P	146162-61-0P	146162-62-1P	146162-63-2P
	146162-64-3P	146165-06-2P	146165-07-3P	146165-09-5P	146182-82-3P

146182-83-4P 149238-55-1P 149271-55-6P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and use of, in electroluminescent devices)  
 IT 90-43-7, [1,1'-Biphenyl]-2-ol 92-69-3, [1,1'-Biphenyl]-4-ol 108-68-9,  
 3,5-Dimethylphenol 555-31-7, Aluminum isopropoxide 580-51-8,  
 [1,1'-Biphenyl]-3-ol 826-81-3, 2-Methyl-8-quinolinol 1138-52-9  
 115310-98-0, 2,4-Dimethyl-8-quinolinol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, in luminescent chelate formation)

=> s (146162-49-4 or 146162-50-7 or 146162-51-8 or 146162-52-9 or 146162-53-0 or 146162-54-1 or 146162-55-2 or 146162-56-3 or 146162-57-4 or 146162-58-5)/rn

39 146162-49-4  
 0 146162-49-4D  
 39 146162-49-4/RN  
 (146162-49-4 (NOTL) 146162-49-4D )  
 7 146162-50-7  
 0 146162-50-7D  
 7 146162-50-7/RN  
 (146162-50-7 (NOTL) 146162-50-7D )  
 2 146162-51-8  
 0 146162-51-8D  
 2 146162-51-8/RN  
 (146162-51-8 (NOTL) 146162-51-8D )  
 14 146162-52-9  
 0 146162-52-9D  
 14 146162-52-9/RN  
 (146162-52-9 (NOTL) 146162-52-9D )  
 3 146162-53-0  
 0 146162-53-0D  
 3 146162-53-0/RN  
 (146162-53-0 (NOTL) 146162-53-0D )  
 439 146162-54-1  
 2 146162-54-1D  
 438 146162-54-1/RN  
 (146162-54-1 (NOTL) 146162-54-1D )  
 4 146162-55-2  
 0 146162-55-2D  
 4 146162-55-2/RN  
 (146162-55-2 (NOTL) 146162-55-2D )  
 2 146162-56-3  
 0 146162-56-3D  
 2 146162-56-3/RN  
 (146162-56-3 (NOTL) 146162-56-3D )  
 2 146162-57-4  
 0 146162-57-4D  
 2 146162-57-4/RN  
 (146162-57-4 (NOTL) 146162-57-4D )  
 3 146162-58-5  
 0 146162-58-5D  
 3 146162-58-5/RN  
 (146162-58-5 (NOTL) 146162-58-5D )  
 L4 475 (146162-49-4 OR 146162-50-7 OR 146162-51-8 OR 146162-52-9 OR  
 146162-53-0 OR 146162-54-1 OR 146162-55-2 OR 146162-56-3 OR  
 146162-57-4 OR 146162-58-5)/RN

=> s (146162-59-6 or 146162-60-9 or 146162-61-0 or 146162-62-1 or 146162-63-2 or 146162-64-3 or 146165-06-2 or 146165-07-3 or 146165-09-5 or 146182-82-3 or 146182-83-4 or 149238-55-1 or 149271-55-6)/rn

4 146162-59-6  
 0 146162-59-6D  
 4 146162-59-6/RN  
 (146162-59-6 (NOTL) 146162-59-6D )  
 3 146162-60-9  
 0 146162-60-9D  
 3 146162-60-9/RN  
 (146162-60-9 (NOTL) 146162-60-9D )  
 2 146162-61-0  
 0 146162-61-0D  
 2 146162-61-0/RN  
 (146162-61-0 (NOTL) 146162-61-0D )  
 3 146162-62-1  
 0 146162-62-1D  
 3 146162-62-1/RN  
 (146162-62-1 (NOTL) 146162-62-1D )



8 146162-63-2  
 0 146162-63-2D  
 8 146162-63-2/RN  
 (146162-63-2 (NOTL) 146162-63-2D )  
 6 146162-64-3  
 0 146162-64-3D  
 6 146162-64-3/RN  
 (146162-64-3 (NOTL) 146162-64-3D )  
 2 146165-06-2  
 0 146165-06-2D  
 2 146165-06-2/RN  
 (146165-06-2 (NOTL) 146165-06-2D )  
 2 146165-07-3  
 0 146165-07-3D  
 2 146165-07-3/RN  
 (146165-07-3 (NOTL) 146165-07-3D )  
 2 146165-09-5  
 0 146165-09-5D  
 2 146165-09-5/RN  
 (146165-09-5 (NOTL) 146165-09-5D )  
 3 146182-82-3  
 0 146182-82-3D  
 3 146182-82-3/RN  
 (146182-82-3 (NOTL) 146182-82-3D )  
 3 146182-83-4  
 0 146182-83-4D  
 3 146182-83-4/RN  
 (146182-83-4 (NOTL) 146182-83-4D )  
 3 149238-55-1  
 0 149238-55-1D  
 3 149238-55-1/RN  
 (149238-55-1 (NOTL) 149238-55-1D )  
 1 149271-55-6  
 0 149271-55-6D  
 1 149271-55-6/RN  
 (149271-55-6 (NOTL) 149271-55-6D )  
 L5 16 (146162-59-6 OR 146162-60-9 OR 146162-61-0 OR 146162-62-1 OR  
 146162-63-2 OR 146162-64-3 OR 146165-06-2 OR 146165-07-3 OR  
 146165-09-5 OR 146182-82-3 OR 146182-83-4 OR 149238-55-1 OR 14927  
 1-55-6)/RN

=> s 14 or 15

L6 483 L4 OR L5

=> s 31248-39-2/rn

320 31248-39-2

4 31248-39-2D

L7 317 31248-39-2/RN

(31248-39-2 (NOTL) 31248-39-2D )

=> s 16 and 17

L8 27 L6 AND L7

=> s 18 and py<=2003

23955526 PY<=2003

L9 9 L8 AND PY<=2003

=> d 19 1-9 ibib abs

L9 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:796823 CAPLUS Full-text

DOCUMENT NUMBER: 139:299047

TITLE: Organic electroluminescent device using aluminum  
bis(2-methyl-8-quinolinolato)(naphthalenolato) host  
material

INVENTOR(S): Tsuji, Taishi; Miyazaki, Hiroshi

PATENT ASSIGNEE(S): Pioneer Corporation, Japan; Nippon Steel Chemical Co.,  
Ltd.

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003083009	A1	20031009	WO 2003-JP3776	20030327 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, BR, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003227239	A1	20031013	AU 2003-227239	20030327 <--
EP 1493797	A1	20050105	EP 2003-715461	20030327
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1643109	A	20050720	CN 2003-807394	20030327
US 2005233164	A1	20051020	US 2005-509390	20050628
PRIORITY APPLN. INFO.:				
			JP 2002-96908	A 20020329
			WO 2003-JP3776	W 20030327

AB The invention refers to an organic electroluminescent device comprising an Al bis(2-methyl-8-quinolinolato)(naphthalenolato) complex as a host and a phosphorescent guest material.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2003:356106 CAPLUS Full-text  
 DOCUMENT NUMBER: 138:360215  
 TITLE: Organic electroluminescence element  
 INVENTOR(S): Tsuji, Taishi; Miyaguchi, Satoshi; Wakimoto, Takeo  
 PATENT ASSIGNEE(S): Pioneer Corporation, Japan  
 SOURCE: Eur. Pat. Appl., 50 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1308494	A2	20030507	EP 2002-257505	20021029 <--
EP 1308494	A3	20031126		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003142264	A	20030516	JP 2001-334325	20011031 <--
US 2003129452	A1	20030710	US 2002-282244	20021029 <--
JP 2007150338	A	20070614	JP 2007-3186	20070111
PRIORITY APPLN. INFO.:				
OTHER SOURCE(S):			JP 2001-334325	A 20011031

AB Organic electroluminescent elements comprising an anode; a hole transport layer; a light-emitting layer made of organic compds.; an electron transport layer; and a cathode are described in which the light-emitting layer comprises an organic host material having an electron transport capability and an organic guest material of phosphorescent material, the ionization potential of the organic host material being higher than that of the hole transport layer by 0.4-0.8 eV.

L9 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
 ACCESSION NUMBER: 2002:978539 CAPLUS Full-text  
 DOCUMENT NUMBER: 138:47453  
 TITLE: Method of making full color display panels  
 INVENTOR(S): Haase, Michael Albert; Baude, Paul Frederic; Williams, Robert Carnes  
 PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA  
 SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002195929	A1	20021226	US 2001-886447	20010621 <--
US 6791258	B2	20040914		

WO 2003001598 A1 20030103 WO 2002-US10591 20020405 <--  
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,  
PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
UA, UG, UZ, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
AU 2002305139 A1 20030108 AU 2002-305139 20020405 <--  
EP 1399967 A1 20040324 EP 2002-733941 20020405  
EP 1399967 B1 20070110  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
JP 2004534361 T 20041111 JP 2003-507892 20020405  
EP 1768184 A2 20070328 EP 2006-25156 20020405  
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC,  
NL, PT, SE, TR, AL, LT, LV, MK, RO, SI  
US 2004217699 A1 20041104 US 2004-858131 20040601  
US 6965198 B2 20051115  
US 2005208205 A1 20050922 US 2005-127358 20050512  
PRIORITY APPLN. INFO.: US 2001-886447 A 20010621  
EP 2002-733941 A3 20020405  
WO 2002-US10591 W 20020405  
US 2004-858131 A1 20040601

AB A method of fabricating organic light emitting pixels having red, green, and blue sub-pixels on a display panel is used entailing depositing a hole transporting layer and an electron transporting layer for each pixel; and depositing red, green, and blue dopants simultaneously in a host layer such that the blue dopant is deposited on the blue sub-pixel and at least one of the red and green sub-pixels. The method of claim 1 wherein a shadow mask is used during the deposition process, wherein removable reusable shadow mask is used during the deposition process. A method of correcting for parallax in the making of an organic light emitting display panel is also described entailing using line-of-sight vapor deposition to create a series of adjacent pixels, each pixel comprising sub-pixels, wherein one or more source is positioned at an angle = .apprx.20°-70° from the pixel surfaces and wherein a shadow mask is used in the deposition process, the mask having slots defined by ribs wherein the pitch of the ribs is smaller than the pitch of the pixels. An device comprising an organic light emitting full color display panel wherein a blue dopant is dispersed in at least one non-blue sub-pixel is also described. An organic light emitting color display panel is also described comprising a plurality of full color pixels formed on a substrate, each full color pixel comprising a red, a green, and a blue sub-pixel, an integrated shadow mask that corrects for parallax, for forming the full color pixels, comprising a plurality of ribs erected on the substrate, wherein the pitch of the ribs is smaller than the pitch of the pixels. A removable mask for the device by angled evaporation wherein the mask comprises a series of ribs that define slots in which individual pixels are built is also described.

REFERENCE COUNT: 12. THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:928080 CAPLUS Full-text

DOCUMENT NUMBER: 138:17951

TITLE: Organometallic compounds and emission-shifting organic electrophosphorescence

INVENTOR(S): Lamansky, Sergey; Thompson, Mark E.; Adamovich, Vadim; Djurovich, Peter I.; Adachi, Chihaya; Baldo, Marc A.; Forrest, Stephen R.; Kwong, Raymond

PATENT ASSIGNEE(S): The Trustees of Princeton University, USA; Universal Display Corporation; The University of Southern California

SOURCE: U.S. Pat. Appl. Publ., 87 pp., Cont.-in-part of U.S. Ser. No. 637,766.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002182441	A1	20021205	US 2001-978455	20011016 <--
US 6939624	B2	20050906		
US 6911271	B1	20050628	US 2000-637766	20000811
TW 593625	B	20040621	TW 2001-90119946	20010813
US 2005214576	A1	20050929	US 2005-122160	20050503
PRIORITY APPLN. INFO.:			US 2000-637766	A2 20000811

US 2001-283814P P 20010413  
US 2001-978455 A1 20011016

AB Organic light-emitting devices including an emissive layer comprising an organometallic compound are described in which the organometallic compound comprises a heavy transition metal (e.g., Os, Ir, Pt, or Au) that produces an efficient phosphorescent emission at room temperature from a mixture of metal-to-ligand charge transfer and  $\pi$ - $\pi^*$  ligand states;  $\geq 1$  mono-anionic bidentate carbon-coordination ligand bound to the heavy transition metal, the ligand(s) being substituted with an electron-donating substituent and/or an electron-withdrawing substituent which shifts the emission, relative to the unsubstituted ligand, to either the blue, green, or red region of the visible spectrum; and  $\geq 1$  non-monoanionic bidentate carbon-coordination ligand bound to the heavy transition metal which ligand(s) causes the emission to have a well defined vibronic structure. The organometallic compds. are also claimed.

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:595262 CAPLUS Full-text  
DOCUMENT NUMBER: 137:147612  
TITLE: Light emitting device  
INVENTOR(S): Seo, Satoshi; Yamazaki, Shunpei  
PATENT ASSIGNEE(S): Semiconductor Energy Laboratory Co., Ltd., Japan  
SOURCE: U.S. Pat. Appl. Publ., 39 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002105005	A1	20020808	US 2002-72507	20020205 <--
US 7196360	B2	20070327		
TW 582121	B	20040401	TW 2002-91101804	20020201
TW 225312	B	20041211	TW 2003-92118393	20020201
SG 114527	A1	20050928	SG 2002-660	20020204
CN 1370034	A	20020918	CN 2002-104565	20020208 <--
JP 2002313584	A	20021025	JP 2002-32375	20020208 <--
JP 3977095	B2	20070919		
US 2006243970	A1	20061102	US 2006-456892	20060712
PRIORITY APPLN. INFO.:			JP 2001-32995	A 20010208
			US 2002-72507	A1 20020205

AB Organic light-emitting devices are described in which a hole-transporting region and an electron-transporting region sandwich a mixed region formed from a mixture of the hole-transporting and electron-transporting materials, with the transition between regions occurring in compositionally graded regions which extend from the hole-transporting and electron-transporting region to the mixed regions. The mixed region may be doped with a light-emitting material. Electronic equipment (organic electroluminescent displays, video cameras, digital cameras, image reproduction apparatus, portable computers, personal computers, mobile telephones, and acoustic equipment) employing the devices is also described.

REFERENCE COUNT: 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L9 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2002:575513 CAPLUS Full-text  
DOCUMENT NUMBER: 137:131918  
TITLE: Organic light emitting element and display device  
using the element  
INVENTOR(S): Seo, Satoshi; Yamazaki, Shunpei  
PATENT ASSIGNEE(S): Semiconductor Energy Laboratory Co., Ltd., Japan  
SOURCE: U.S. Pat. Appl. Publ., 49 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002101154	A1	20020801	US 2002-60427	20020129 <--
US 7173370	B2	20070206		
SG 118110	A1	20060127	SG 2002-365	20020123
TW 520614	B	20030211	TW 2002-91101688	20020131 <--
JP 2002305085	A	20021018	JP 2002-25701	20020201 <--
CN 1378409	A	20021106	CN 2002-118312	20020201 <--

PRIORITY APPLN. INFO.: JP 2001-25971 A 20010201

AB Organic light-emitting devices are described in which the organic layers include a mixed region (e.g., a layer in which both a hole-transporting material and electron-transporting material are mixed, a region in which a hole-transporting material and the host material for the light-emitting material are mixed, etc.). Interfaces between resp. layers which exist in a conventional multilayered structure are eliminated. Preferably, the light-emitting layer(s) include a red-emitting triplet material. Electronic equipment (organic electroluminescent displays, video cameras, digital cameras, image reproduction apparatus, portable computers, personal computers, mobile telephones, and acoustic equipment) employing the devices is also described.

REFERENCE COUNT: 108 THERE ARE 108 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:143099 CAPLUS Full-text

DOCUMENT NUMBER: 136:191506

TITLE: Organometallic compounds and emission-shifting organic electrophosphorescence

INVENTOR(S): Lamansky, Sergey; Thompson, Mark E.; Adamovich, Vadim; Djurovich, Peter L.; Adachi, Chihaya; Baldo, Marc A.; Forrest, Stephen R.; Kwong, Raymond C.

PATENT ASSIGNEE(S): The Trustees of Princeton University, USA; The University of Southern California; Universal Display Corporation

SOURCE: PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002015645	A1	20020221	WO 2001-US25108	20010810 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 6911271	B1	20050628	US 2000-637766	20000811
AU 200183274	A	20020225	AU 2001-83274	20010810 <--
EP 1325671	A1	20030709	EP 2001-962061	20010810 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004506305	T	20040226	JP 2002-519380	20010810
TW 593625	B	20040621	TW 2001-90119946	20010813
IN 2003DN00157	A	20070316	IN 2003-DN157	20030213
PRIORITY APPLN. INFO.:			US 2000-637766	A 20000811
			US 2001-283814P	P 20010413
			WO 2001-US25108	W 20010810

AB Organic light-emitting devices including an emissive layer comprising an organometallic compound are described in which the organometallic compound comprises a heavy transition metal (e.g., Os, Ir, Pt, or Au) that produces an efficient phosphorescent emission at room temperature from a mixture of metal-to-ligand charge transfer and  $\pi$ - $\pi^*$  ligand states;  $\geq 1$  mono-anionic bidentate carbon-coordination ligand bound to the heavy transition metal, the ligand(s) being substituted with an electron-donating substituent and/or an electron-withdrawing substituent which shifts the emission, relative to the unsubstituted ligand, to either the blue, green, or red region of the visible spectrum; and  $\geq 1$  non-monoanionic bidentate carbon-coordination ligand bound to the heavy transition metal which ligand(s) causes the emission to have a well defined vibronic structure. The organometallic compds. are also claimed.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:493470 CAPLUS Full-text

DOCUMENT NUMBER: 133:127447

TITLE: Thermal transfer element and process for forming organic electroluminescent devices

INVENTOR(S): Wolk, Martin B.; McCormick, Fred B.; Baude, Paul F.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 61 pp.

CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000041893	A1	20000720	WO 2000-US616	20000111 <--
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6114088	A	20000905	US 1999-231723	19990115 <--
US 6140009	A	20001031	US 2000-477966	20000105 <--
AU 200027237	A	20000801	AU 2000-27237	20000111 <--
EP 1144197	A1	20011017	EP 2000-905582	20000111 <--
EP 1144197	B1	20030611		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
US 6214520	B1	20010410	US 2000-545932	20000410 <--
US 6221553	B1	20010424	US 2000-546414	20000410 <--
US 6270944	B1	20010807	US 2000-545930	20000410 <--
US 2001036561	A1	20011101	US 2001-785721	20010216 <--
HK 1042675	A1	20040625	HK 2002-102182	20020321
US 2002172887	A1	20021121	US 2002-137616	20020502 <--
US 6586153	B2	20030701		

PRIORITY APPLN. INFO.:  
US 1999-231723 A 19990115  
US 1999-473115 A 19991228  
WO 2000-US616 W 20000111  
US 2000-546414 A3 20000410  
US 2001-785721 B3 20010216

AB Methods for making an organic electroluminescent device are described which entail thermally transferring a light-emitting polymer layer and a small mol. layer from  $\geq 1$  thermal transfer donor elements to a receptor so that the light emitting polymer layer and the small mol. layer are disposed between an anode and a cathode on the receptor. The donor elements can include a substrate, an optional light-to-heat conversion layer, and a single or multicomponent transfer layer that can be imagewise transferred to a receptor to form an organic electroluminescent device, portions thereof, or components therefor. Methods for patterning materials are also described which entail forming a donor element comprising a donor substrate and a multicomponent thermal transfer layer, the thermal transfer layer having at least a first layer comprising a solvent-coated material and a second layer comprising a solvent-susceptible material, the solvent-susceptible material being incompatible with the solvent used to coat the solvent-coated material, wherein the first layer is disposed between the second layer and the donor substrate; placing the thermal transfer layer proximate a receptor; and selectively thermally transferring the multicomponent transfer layer from the donor element to the receptor, wherein at least one of the solvent-coated material and the solvent-susceptible material comprises an organic electroluminescent material, an organic conductor, or an organic semiconductor. Electroluminescent displays formed using the methods are also described.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:529530 CAPLUS Full-text

DOCUMENT NUMBER: 131:206718

TITLE: A full-color transparent metal-free stacked organic light emitting device with simplified pixel biasing

AUTHOR(S): Parthasarathy, Gautam; Gu, Gong; Forrest, Stephen R.

CORPORATE SOURCE: Center Photonics Optoelectronics Materials, Princeton Materials Inst., Dep. Electrical Engineering, Princeton Univ., Princeton, NJ, 08544, USA

SOURCE: Advanced Materials (Weinheim, Germany) (1999), 11(11), 907-910

CODEN: ADVMEW; ISSN: 0935-9648

PUBLISHER: Wiley-VCH Verlag GmbH

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fabrication of a metal-free stacked organic light-emitting device (MF-SOLED) is described. It consists of a red, blue, and a green subpixel each of which is transparent to the light emitted by itself and by the other subpixels in the stack. An insulating layer is interposed between the middle and top highly transparent subpixels. This allows the 3 subpixels to be referenced to a

common ground eliminating the differential drive schemes required in previous SOLEDs (Gu, 1999). The MF-SOLEDs were characterized by their elec. and optical performance. The device transparency and efficiency was increased when the red-light-absorbing CuPc was replaced by the transparent bathocuproine as the protective electron-injecting layer.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	139.95	315.41
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-7.80	-7.80

FILE 'REGISTRY' ENTERED AT 09:26:13 ON 04 OCT 2007  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9  
DICTIONARY FILE UPDATES: 3 OCT 2007 HIGHEST RN 949140-96-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> S 146162-54-1/RN

L10 1 146162-54-1/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND  
SET COMMAND COMPLETED

=> D L10 RN IN 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y  
THE ESTIMATED COST FOR THIS REQUEST IS 1.19 U.S. DOLLARS  
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN  
RN 146162-54-1 REGISTRY  
IN Aluminum, ([1,1'-biphenyl]-4-olato)bis(2-methyl-8-quinolinolato-  
kN1,kO8)- (9CI)

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND  
SET COMMAND COMPLETED

=>

=> s 146162-54-1/rn  
L11 1 146162-54-1/RN

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
FULL ESTIMATED COST	ENTRY	SESSION
	1.64	317.05
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
CA SUBSCRIBER PRICE	ENTRY	SESSION
	0.00	-7.80

FILE 'CAPLUS' ENTERED AT 09:27:00 ON 04 OCT 2007  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 4 Oct 2007 VOL 147 ISS 15  
 FILE LAST UPDATED: 3 Oct 2007 (20071003/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

```
=> s 146162-54-1/rn
      439 146162-54-1
      2 146162-54-1D
L12      438 146162-54-1/RN
          (146162-54-1 (NOTL) 146162-54-1D )

=> d his

(FILE 'HOME' ENTERED AT 09:07:37 ON 04 OCT 2007)

FILE 'REGISTRY' ENTERED AT 09:08:04 ON 04 OCT 2007
L1      STRUCTURE UPLOADED
L2      0 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 09:12:41 ON 04 OCT 2007
      E US515066/PN
      E US5150006/PN
L3      1 S E3
L4      475 S (146162-49-4 OR 146162-50-7 OR 146162-51-8 OR 146162-52-9 OR
L5      16 S (146162-59-6 OR 146162-60-9 OR 146162-61-0 OR 146162-62-1 OR
L6      483 S L4 OR L5
L7      317 S 31248-39-2/RN
L8      27 S L6 AND L7
L9      9 S L8 AND PY<=2003

FILE 'REGISTRY' ENTERED AT 09:26:13 ON 04 OCT 2007
L10     1 S 146162-54-1/RN
        SET NOTICE 1 DISPLAY
        SET NOTICE LOGIN DISPLAY
L11     1 S 146162-54-1/RN

FILE 'CAPLUS' ENTERED AT 09:27:00 ON 04 OCT 2007
L12     438 S 146162-54-1/RN

=> s 112 and 17
L13     23 L12 AND L7

=> s 113 and py<=2003
      23955526 PY<=2003
L14     7 L13 AND PY<=2003

=> d 114 1-7 ibib abs
```



L14 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:356106 CAPLUS Full-text  
DOCUMENT NUMBER: 138:360215  
TITLE: Organic electroluminescence element  
INVENTOR(S): Tsuji, Taishi; Miyaguchi, Satoshi; Wakimoto, Takeo  
PATENT ASSIGNEE(S): Pioneer Corporation, Japan  
SOURCE: Eur. Pat. Appl., 50 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1308494	A2	20030507	EP 2002-257505	20021029 <--
EP 1308494	A3	20031126		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003142264	A	20030516	JP 2001-334325	20011031 <--
US 2003129452	A1	20030710	US 2002-282244	20021029 <--
JP 2007150338	A	20070614	JP 2007-3186	20070111
PRIORITY APPLN. INFO.:			JP 2001-334325	A 20011031

OTHER SOURCE(S): MARPAT 138:360215

AB Organic electroluminescent elements comprising an anode; a hole transport layer; a light-emitting layer made of organic compds.; an electron transport layer; and a cathode are described in which the light-emitting layer comprises an organic host material having an electron transport capability and an organic guest material of phosphorescent material, the ionization potential of the organic host material being higher than that of the hole transport layer by 0.4-0.8 eV.

L14 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:978539 CAPLUS Full-text  
DOCUMENT NUMBER: 138:47453  
TITLE: Method of making full color display panels  
INVENTOR(S): Haase, Michael Albert; Baude, Paul Frederic; Williams, Robert Carnes  
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA  
SOURCE: U.S. Pat. Appl. Publ., 9 pp.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002195929	A1	20021226	US 2001-886447	20010621 <--
US 6791258	B2	20040914		
WO 2003001598	A1	20030103	WO 2002-US10591	20020405 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002305139	A1	20030108	AU 2002-305139	20020405 <--
EP 1399967	A1	20040324	EP 2002-733941	20020405
EP 1399967	B1	20070110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004534361	T	20041111	JP 2003-507892	20020405
EP 1768184	A2	20070328	EP 2006-25156	20020405
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR, AL, LT, LV, MK, RO, SI				
US 2004217699	A1	20041104	US 2004-858131	20040601
US 6965198	B2	20051115		
US 2005208205	A1	20050922	US 2005-127358	20050512
PRIORITY APPLN. INFO.:			US 2001-886447	A 20010621
			EP 2002-733941	A3 20020405
			WO 2002-US10591	W 20020405
			US 2004-858131	A1 20040601

AB A method of fabricating organic light emitting pixels having red, green, and blue sub-pixels on a display panel is used entailing depositing a hole transporting layer and an electron transporting layer for each pixel; and depositing red, green, and blue dopants simultaneously in a host layer such that the blue dopant is deposited on the blue sub-pixel and at least one of the red and green sub-pixels. The method of claim 1 wherein a shadow mask is used during the deposition process, wherein removable reusable shadow mask is used during the deposition process. A method of correcting for parallax in the making of an organic light emitting display panel is also described entailing using line-of-sight vapor deposition to create a series of adjacent pixels, each pixel comprising sub-pixels, wherein one or more source is positioned at an angle = .apprx.20°-70° from the pixel surfaces and wherein a shadow mask is used in the deposition process, the mask having slots defined by ribs wherein the pitch of the ribs is smaller than the pitch of the pixels. An device comprising an organic light emitting full color display panel wherein a blue dopant is dispersed in at least one non-blue sub-pixel is also described. An organic light emitting color display panel is also described comprising a plurality of full color pixels formed on a substrate, each full color pixel comprising a red, a green, and a blue sub-pixel, an integrated shadow mask that corrects for parallax, for forming the full color pixels, comprising a plurality of ribs erected on the substrate, wherein the pitch of the ribs is smaller than the pitch of the pixels. A removable mask for the device by angled evaporation wherein the mask comprises a series of ribs that define slots in which individual pixels are built is also described.

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:928080 CAPLUS Full-text

DOCUMENT NUMBER: 138:17951

TITLE: Organometallic compounds and emission-shifting organic electrophosphorescence

INVENTOR(S): Lamansky, Sergey; Thompson, Mark E.; Adamovich, Vadim; Djurovich, Peter I.; Adachi, Chihaya; Baldo, Marc A.; Forrest, Stephen R.; Kwong, Raymond

PATENT ASSIGNEE(S): The Trustees of Princeton University, USA; Universal Display Corporation; The University of Southern California

SOURCE: U.S. Pat. Appl. Publ., 87 pp., Cont.-in-part of U.S. Ser. No. 637,766.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002182441	A1	20021205	US 2001-978455	20011016 <--
US 6939624	B2	20050906		
US 6911271	B1	20050628	US 2000-637766	20000811
TW 593625	B	20040621	TW 2001-90119946	20010813
US 2005214576	A1	20050929	US 2005-122160	20050503
PRIORITY APPLN. INFO.:			US 2000-637766	A2 20000811
			US 2001-283814P	P 20010413
			US 2001-978455	A1 20011016

AB Organic light-emitting devices including an emissive layer comprising an organometallic compound are described in which the organometallic compound comprises a heavy transition metal (e.g., Os, Ir, Pt, or Au) that produces an efficient phosphorescent emission at room temperature from a mixture of metal-to-ligand charge transfer and  $\pi$ - $\pi^*$  ligand states;  $\geq 1$  mono-anionic bidentate carbon-coordination ligand bound to the heavy transition metal, the ligand(s) being substituted with an electron-donating substituent and/or an electron-withdrawing substituent which shifts the emission, relative to the unsubstituted ligand, to either the blue, green, or red region of the visible spectrum; and  $\geq 1$  non-monoanionic bidentate carbon-coordination ligand bound to the heavy transition metal which ligand(s) causes the emission to have a well defined vibronic structure. The organometallic compds. are also claimed.

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:595262 CAPLUS Full-text

DOCUMENT NUMBER: 137:147612

TITLE: Light emitting device

INVENTOR(S): Seo, Satoshi; Yamazaki, Shunpei

PATENT ASSIGNEE(S): Semiconductor Energy Laboratory Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 39 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002105005	A1	20020808	US 2002-72507	20020205 <--
US 7196360	B2	20070327		
TW 582121	B	20040401	TW 2002-91101804	20020201
TW 225312	B	20041211	TW 2003-92118393	20020201
SG 114527	A1	20050928	SG 2002-660	20020204
CN 1370034	A	20020918	CN 2002-104565	20020208 <--
JP 2002313584	A	20021025	JP 2002-32375	20020208 <--
JP 3977095	B2	20070919		
US 2006243970	A1	20061102	US 2006-456892	20060712
PRIORITY APPLN. INFO.:			JP 2001-32995	A 20010208
			US 2002-72507	A1 20020205

AB Organic light-emitting devices are described in which a hole-transporting region and an electron-transporting region sandwich a mixed region formed from a mixture of the hole-transporting and electron-transporting materials, with the transition between regions occurring in compositionally graded regions which extend from the hole-transporting and electron-transporting region to the mixed regions. The mixed region may be doped with a light-emitting material. Electronic equipment (organic electroluminescent displays, video cameras, digital cameras, image reproduction apparatus, portable computers, personal computers, mobile telephones, and acoustic equipment) employing the devices is also described.

REFERENCE COUNT: 111 THERE ARE 111 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L14 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:575513 CAPLUS Full-text

DOCUMENT NUMBER: 137:131918

TITLE: Organic light emitting element and display device  
using the element

INVENTOR(S): Seo, Satoshi; Yamazaki, Shunpei

PATENT ASSIGNEE(S): Semiconductor Energy Laboratory Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 49 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002101154	A1	20020801	US 2002-60427	20020129 <--
US 7173370	B2	20070206		
SG 118110	A1	20060127	SG 2002-365	20020123
TW 520614	B	20030211	TW 2002-91101688	20020131 <--
JP 2002305085	A	20021018	JP 2002-25701	20020201 <--
CN 1378409	A	20021106	CN 2002-118312	20020201 <--
PRIORITY APPLN. INFO.:			JP 2001-25971	A 20010201

AB Organic light-emitting devices are described in which the organic layers include a mixed region (e.g., a layer in which both a hole-transporting material and electron-transporting material are mixed, a region in which a hole-transporting material and the host material for the light-emitting material are mixed, etc.). Interfaces between resp. layers which exist in a conventional multilayered structure are eliminated. Preferably, the light-emitting layer(s) include a red-emitting triplet material. Electronic equipment (organic electroluminescent displays, video cameras, digital cameras, image reproduction apparatus, portable computers, personal computers, mobile telephones, and acoustic equipment) employing the devices is also described.

REFERENCE COUNT: 108 THERE ARE 108 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L14 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:143099 CAPLUS Full-text

DOCUMENT NUMBER: 136:191506

TITLE: Organometallic compounds and emission-shifting organic  
electrophosphorescence

INVENTOR(S): Lamansky, Sergey; Thompson, Mark E.; Adamovich, Vadim;  
Djurovich, Peter L.; Adachi, Chihaya; Baldo, Marc A.;  
Forrest, Stephen R.; Kwong, Raymond C.

PATENT ASSIGNEE(S): The Trustees of Princeton University, USA; The  
University of Southern California; Universal Display  
Corporation

SOURCE: PCT Int. Appl., 155 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002015645	A1	20020221	WO 2001-US25108	20010810 <--
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 6911271	B1	20050628	US 2000-637766	20000811
AU 200183274	A	20020225	AU 2001-83274	20010810 <--
EP 1325671	A1	20030709	EP 2001-962061	20010810 <--
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
JP 2004506305	T	20040226	JP 2002-519380	20010810
TW 593625	B	20040621	TW 2001-90119946	20010813
IN 2003DN00157	A	20070316	IN 2003-DN157	20030213
PRIORITY APPLN. INFO.:			US 2000-637766	A 20000811
			US 2001-283814P	P 20010413
			WO 2001-US25108	W 20010810

AB Organic light-emitting devices including an emissive layer comprising an organometallic compound are described in which the organometallic compound comprises a heavy transition metal (e.g., Os, Ir, Pt, or Au) that produces an efficient phosphorescent emission at room temperature from a mixture of metal-to-ligand charge transfer and  $\pi$ - $\pi^*$  ligand states;  $\geq 1$  mono-anionic bidentate carbon-coordination ligand bound to the heavy transition metal, the ligand(s) being substituted with an electron-donating substituent and/or an electron-withdrawing substituent which shifts the emission, relative to the unsubstituted ligand, to either the blue, green, or red region of the visible spectrum; and  $\geq 1$  non-monoanionic bidentate carbon-coordination ligand bound to the heavy transition metal which ligand(s) causes the emission to have a well defined vibronic structure. The organometallic compds. are also claimed.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2007 ACS on STN  
ACCESSION NUMBER: 2000:493470 CAPLUS Full-text  
DOCUMENT NUMBER: 133:127447  
TITLE: Thermal transfer element and process for forming organic electroluminescent devices  
INVENTOR(S): Wolk, Martin B.; McCormick, Fred B.; Baude, Paul F.  
PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA  
SOURCE: PCT Int. Appl., 61 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 3  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000041893	A1	20000720	WO 2000-US616	20000111 <--
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6114088	A	20000905	US 1999-231723	19990115 <--
US 6140009	A	20001031	US 2000-477966	20000105 <--
AU 200027237	A	20000801	AU 2000-27237	20000111 <--
EP 1144197	A1	20011017	EP 2000-905582	20000111 <--
EP 1144197	B1	20030611		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
US 6214520	B1	20010410	US 2000-545932	20000410 <--
US 6221553	B1	20010424	US 2000-546414	20000410 <--

US 6270944	B1	20010807	US 2000-545930	20000410 <--
US 2001036561	A1	20011101	US 2001-785721	20010216 <--
HK 1042675	A1	20040625	HK 2002-102182	20020321
US 2002172887	A1	20021121	US 2002-137616	20020502 <--
US 6586153	B2	20030701		

PRIORITY APPLN. INFO.:

US 1999-231723	A	19990115
US 1999-473115	A	19991228
WO 2000-US616	W	20000111
US 2000-546414	A3	20000410
US 2001-785721	B3	20010216

AB Methods for making an organic electroluminescent device are described which entail thermally transferring a light-emitting polymer layer and a small mol. layer from  $\geq 1$  thermal transfer donor elements to a receptor so that the light emitting polymer layer and the small mol. layer are disposed between an anode and a cathode on the receptor. The donor elements can include a substrate, an optional light-to-heat conversion layer, and a single or multicomponent transfer layer that can be imagewise transferred to a receptor to form an organic electroluminescent device, portions thereof, or components therefor. Methods for patterning materials are also described which entail forming a donor element comprising a donor substrate and a multicomponent thermal transfer layer, the thermal transfer layer having at least a first layer comprising a solvent-coated material and a second layer comprising a solvent-susceptible material, the solvent-susceptible material being incompatible with the solvent used to coat the solvent-coated material, wherein the first layer is disposed between the second layer and the donor substrate; placing the thermal transfer layer proximate a receptor; and selectively thermally transferring the multicomponent transfer layer from the donor element to the receptor, wherein at least one of the solvent-coated material and the solvent-susceptible material comprises an organic electroluminescent material, an organic conductor, or an organic semiconductor. Electroluminescent displays formed using the methods are also described.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=>

=> fil reg

FILE 'REGISTRY' ENTERED AT 15:36:42 ON 02 AUG 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 1 AUG 2007 HIGHEST RN 943895-11-2

DICTIONARY FILE UPDATES: 1 AUG 2007 HIGHEST RN 943895-11-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d ide can tot 123

L23 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2007 ACS on STN

RN 844435-92-3 REGISTRY

ED Entered STN: 08 Mar 2005

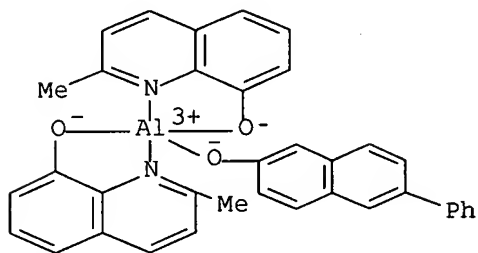
CN Aluminum, bis(2-methyl-8-quinolinolato-kN1,kO8)(6-phenyl-2-naphthalenolato)- (9CI) (CA INDEX NAME)

MF C36 H27 Al N2 O3

CI CCS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL



7 REFERENCES IN FILE CA (1907 TO DATE)

7 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 147:104960

REFERENCE 2: 147:44505

REFERENCE 3: 145:446064